

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (*Currently Amended*) A floating brake rotor assembly ~~with non-load bearing pins~~, comprising:

an annular hub having an outer edge and a plurality of recesses defined in the outer edge, the recesses being spaced apart radially;

each one of said recesses defining at least one mating surface;

an annular brake rotor having an inner circumferential edge and a plurality of protruding members extending radially inward from the inner circumferential edge, the protruding members of the rotor and the recesses of the hub cooperating to define pin openings therebetween when the hub is placed inside and concentrically aligned with the rotor;

each one of said protruding members defining at least one mating surface corresponding to a respective mating surface of said recesses of said hub; and

a plurality of pins having a head and a shaft, the pins being inserted through the pin openings defined between the protruding members and the recesses, the head of each of the pins abutting the rotor and the hub;

said plurality of pins being non-load bearing during braking; and

a retainer mounted on the shaft of each of the pin pins so that the hub and rotor are slightly slidable axially on the pins;

wherein load forces during braking bearing against said corresponding mating surfaces of the rotor protruding members and respective said mating surfaces of the hub recesses.

Claim 2. (*Original*) The floating brake rotor assembly according to claim 1, wherein:

each of said protruding members has a pair of opposed, inwardly tapering bearing faces joined by a distal end surface, the distal end being concave; and

each of said recesses has two diverging bearing faces joined by a concave bottom surface, the bearing faces of said protruding members bearing against the bearing faces of said recesses, the pin opening being defined by the concave distal end of the protruding member and the concave bottom of the recess.

Claim 3. (*Original*) The floating brake rotor assembly according to claim 1, wherein:

each of said protruding members has opposing first and second sides, the first side having a first cavity defined therein; and

each of said recesses has opposing third and fourth sides, the third side having a second cavity defined therein, the pin opening being defined by alignment of the first and second cavities.

Claim 4. (*Original*) The floating brake rotor assembly according to claim 1, wherein said plurality of protruding members and said plurality of recesses comprise six protruding members and six mating recesses.

Claim 5. (*Original*) The floating brake rotor assembly according to claim 1, wherein said brake rotor has a plurality of apertures defined therein for dissipation of heat generated during braking.

Claim 6. (*Original*) The floating brake rotor assembly according to claim 1, wherein said retainer comprises a spiral retaining spring.

Claim 7. (*Original*) The floating brake rotor assembly according to claim 1, wherein said retainer comprises a retaining ring.

Claim 8. (*Currently Amended*) A floating brake rotor assembly ~~with non-load bearing pins~~, comprising:

an annular hub having an outer edge and a plurality of protruding members extending radially from the outer edge, the protruding members being spaced apart radially;

each one of said protruding members defining at least one mating surface;

an annular brake rotor having an inner circumferential edge and a plurality of recesses defined in the inner circumferential edge, each one of said recesses defining at least one mating surface;

the protruding members of the hub and the recesses of the rotor cooperating to define pin openings therebetween when the hub is placed inside and concentrically aligned with the rotor; and

a plurality of pins having a head and a shaft, the pins being inserted through the pin openings defined between the protruding members and the recesses, the head of each of the pins abutting the rotor and the hub; and

a retainer mounted on the shaft of each of the pins so that the hub and rotor are slightly slidable axially on the pins;

wherein load forces during braking bearing against said corresponding mating surfaces of the hub protruding members and respective said mating surfaces of the rotor recesses, and said plurality of pins are non-load bearing during braking.

Claim 9. (Original) The floating brake rotor assembly according to claim 8, wherein each said protruding member has a planar bearing face and an opposing concave side, and each of the recesses defined in said rotor has a planar bearing face and an opposing concave side, the bearing faces of said protruding members abutting the bearing faces of the recesses and the concave sides of said protruding members, and the recesses being aligned in order to define the pin openings.

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Claim 10. (*Original*) The floating brake rotor assembly according to claim 8, wherein said plurality of protruding members and said plurality of recesses comprise six protruding members and six mating recesses.

Claim 11. (*Original*) The floating brake rotor assembly according to claim 8, wherein said brake rotor has a plurality of apertures defined therein for dissipation of heat generated during braking.

Claim 12. (*Original*) The floating brake rotor assembly according to claim 8, wherein said retainer comprises a spiral retaining spring.

Claim 13. (*Original*) The floating brake rotor assembly according to claim 8, wherein said retainer comprises a retaining ring.